

REMARKS/ARGUMENTS

Applicant's representative thanks the examiner for the courtesy of a telephone interview on March 15, 2007 to discuss the procedural issues of entering method claims in the application. Applicant understands that the Office would restrict the claims if method claims were added in view of the original presentation of product claims and would require that any method claims be withdrawn from consideration. Applicant is now not pursuing any method claims in the application and by the present Amendment is pursuing only product claims.

In the Office Action of March 12, 2007, the Examiner advised that the reply filed on January 24, 2007 was not fully responsive to the prior Office Action, dated October 26, 2006, as the Office does not permit shifting invention from product claims to method claims. The present Amendment accordingly amends the claims in a permissible manner, responsive to the Examiner's objections in said prior Office Action, without shifting the claims from product claims to method claims.

Claims 1 and 17 have been amended and claims 12 and 19 cancelled. Claims 1 and 17 now specify that the sulfonated polymer has a number average molecular weight in the range of 18,000 to 26,000 and the polyvinyl alcohol has a number average molecular weight in the range of 7,000 to 13,000. These features are supported in the specification, for example at paragraph 29. In claim 1, reference to a method of production, which the Examiner considered not to be relevant to the patentability of the product, has been deleted.

It is submitted that the amended claims are patentable over the references cited having regard to the following considerations.

The application has two independent claims, claims 1 and 17. Both of these claims require a combination of polyvinyl alcohol and a water-soluble sulfonate polymer each of which has a narrow and specifically defined range of number average molecular weights. The references cited by the Examiner include no teaching of selecting a combination of polyvinyl alcohol and sulfonate polymer having these characteristics, to make a water-soluble film. The specified ranges of number average molecular weights for the two components are very narrow relative to the range of possible molecular weights that are available for polyvinyl alcohol and sulfonate

polymers respectively. The narrow ranges are those shown to have utility in the invention and the claims are limited to them.

As noted by the Examiner in the Office Action of January 6, 2006 in respect of claim 12 (now cancelled), which specified the molecular weight range of the sulfonate polymer, US 3,833,457 Misumi et al. discloses in Example 4 (column 10, lines 10 to 24) the molecular weights of three sulfonated polystyrenes to be 600, 10,000 and 50,000, which are separately used. However, Applicant is claiming in independent claims 1 and 17 a film and composition respectively in which the blend has a particular narrow range of molecular weights of the sulfonate polymer which are distinct from each of the examples of Misumi et al. Further, Misumi discloses *insoluble* coatings of cross-linked polymers, not soluble coatings (see column 1, lines 1 to 9 and 52 to 59). The coatings of Misumi et al. have the property of *water absorption*, but not the property of being *water-soluble*, as claimed by Applicant. Nor does Misumi et al. disclose the use of sulfonated polymers to accelerate the water solubility of the coatings. This is consistent with Misumi et al. disclosing only insoluble coatings.

None of the cited references discloses the combination of polyvinyl alcohol and sulfonate polymer having the specific ranges of number average molecular weights, nor that films made from such combination of components are water soluble and have a water-solubility rate that is dependent on the weight percent of sulfonate polymer in the blends. This is the invention discovered and claimed by Applicant, and the references do not teach or suggest it.

It is submitted that the new features of claims 1 and 17 make these independent claims novel and unobvious in view of the references. Dependent claims 2-11 and 13-16 all depend directly or indirectly from claim 1, and dependent claim 18 depends from claim 17. The dependent claims are therefore also clear of the references.

Applicant respectfully requests reconsideration and allowance of all pending claims. If there are any remaining issues preventing allowance of the claims that may be clarified by telephone, the Examiner is requested to phone the undersigned.

Respectfully submitted,

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